Mathematische Zeitschrift

Band 189 · 1985

Herausgegeben von/Edited by
W.P. Barth, Erlangen
E. Becker, Dortmund
K. Diederich, Wuppertal
G. Faltings, Princeton
H. Heyer, Tübingen
W. Klingenberg, Bonn
C.C. Moore, Berkeley
H.H. Schaefer, Tübingen
L. Smith, Göttingen
W. v. Wahl, Bayreuth

Wissenschaftlicher Beirat/Advisory Board
T. tom Dieck, Göttingen · B. Eckmann, Zürich
E. Heinz, Göttingen · J. Herzog, Essen
K.H. Hofmann, Darmstadt · U. Krengel, Göttingen
G. Pickert, Gießen · A. Pfluger, Zürich
H. Salzmann, Tübingen · K. Zeller, Tübingen

Springer-Verlag
Berlin · Heidelberg · New York · Tokyo

"Mathematische Zeitschrift" was founded in 1918 and edited by *L. Lichtenstein* in cooperation with *K. Knopp, E. Schmidt* and *I. Schur;* after Lichtenstein's death, 1933, it was edited by *K. Knopp.* The Editorial Committee was increased to include *E. Kamke* and *F.K. Schmidt* in 1933, *R. Nevanlinna* in 1936 aand *H. Wielandt* in 1950. The latter became Managing Editor in 1952. He was succeeded in 1973 by *H. Salzmann* and 1977 by *H. Heyer.* As of 1984 *W.P. Barth* and *W. v. Wahl* are the managing editors.

Die **„Mathematische Zeitschrift"** wurde im Jahre 1918 von *L. Lichtenstein* unter der Mitwirkung von *K. Knopp, E. Schmidt* und *I. Schur* gegründet und herausgegeben. Nach dem Tode Lichtensteins übernahm *K. Knopp* 1933 die Herausgabe. Die Schriftleitung ergänzte sich 1933 durch *E. Kamke* und *F. K. Schmidt,* 1936 durch *R. Nevanlinna* und 1950 durch *H. Wielandt,* der 1952 die Herausgabe übernahm. 1973 ging die Federführung an *H. Salzmann* und 1977 an *H. Heyer* über. Seit 1984 sind *W.P. Barth* und *W. v. Wahl* geschäftsführende Herausgeber.

Manuscripts may be sent to / Manuskripte nehmen entgegen:

W.P. Barth, Mathematisches Institut der Universität, Bismarckstr. 1½, D-8520 Erlangen, Federal Republic of Germany

E. Becker, FB Mathematik, Universität Dortmund, Postfach 50 05 00, D-4600 Dortmund 50, Federal Republic of Germany

K. Diederich, Gesamthochschule, Fachbereich 7, Mathematik, Gaußstr. 20, D-5600 Wuppertal 1, Federal Republic of Germany

G. Faltings, University of Princeton, Dept. of Mathematics, Fine Hall – Washington Road, Princeton, New Jersey 08544, USA

H. Heyer, Mathematisches Institut der Universität, Auf der Morgenstelle 10, D-7400 Tübingen, Federal Republic of Germany

W. Klingenberg, Mathematisches Institut der Universität, Wegelerstr. 10, D-5300 Bonn, Federal Republic of Germany

C.C. Moore, Mathematical Sciences Research Institute, 2223 Fulton Street, Room 603, Berkeley, CA 94720, USA

H.H. Schaefer, Mathematisches Institut der Universität, Auf der Morgenstelle 10, D-7400 Tübingen, Federal Republic of Germany

L. Smith, Mathematisches Institut der Universität, Bunsenstr. 3–5, D-3400 Göttingen, Federal Republic of Germany

W. v. Wahl, Mathematisches Institut der Universität, Postfach 30 08, D-8580 Bayreuth, Federal Republic of Germany

Copyright

Submission of a manuscript implies: that the work described has not been published before (except in the form of an abstract or as part of a published lecture, review, or thesis); that it is not under consideration for publication elsewhere; that its publication has been approved by all coauthors, if any, as well as by the responsible authorities at the institute where the work has been carried out; that, if and when the manuscript is accepted for publication, the authors agree to automatic transfer of the copyright to the publisher (society); and that the manuscript will not be published elsewhere in any language without the consent of the copyright holders.

All articles published in this journal are protected by copyright, which covers the exclusive rights to reproduce and distribute the article (e.g., as offprints), as well as all translation rights. No material published in this journal may be reproduced photographically or stored on microfilm, in electronic data bases, video disks, etc., without first obtaining written permission from the publisher.

The use of general descriptive names, trade names, trademarks, etc., in this publication, even if not specifically identified, does not imply that these names are not protected by the relevant laws and regulations.

While the advice and information in this journal is believed to be true and accurate at the date of its going to press, neither the authors, the editors, nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Special regulations for photocopies in the USA: Photocopies may be made for personal or in-house use beyond the limitations stipulated under Section 107 or 108 of U.S. Copyright Law, provided a fee is paid. This fee is US $0.20 per page, or a minimum of US $1.00 if an article contains fewer than five pages. All fees should be paid to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, USA, stating the ISSN 0025-5874, the volume, and the first and last page numbers of each article copied. The copyright owner's consent does not include copying for general distribution, promotion, new works, or resale. In these cases, specific written permission must first be obtained from the publisher.

Other regulations: Authors publishing in this journal can, under certain conditions, benefit from library and photocopy fees collected by VG WORT. Authors of German nationality and those resident in the Federal Republic of Germany or Berlin (West), as well as citizens of Austria, Switzerland and member countries of the European Community, may apply to Verwertungsgesellschaft WORT, Abteilung Wissenschaft, Goethestraße 49, D-8000 München 2, for detailed information.

Springer-Verlag Berlin Heidelberg New York Tokyo
Printers: Universitätsdruckerei H. Stürtz AG, D-8700 Würzburg
© Springer-Verlag, Berlin Heidelberg 1985
Springer-Verlag GmbH & Co. KG, 1000 Berlin 33
Printed in Germany

Inhalt/Contents

Al-Sabti, G.: Framing Sphere Bundles over Spheres, the Smith Pairing, and Three-Fold Toda Brackets 457

Alt, H.W., Tomi, F.: Regularity and Finiteness of Solutions to the Free Boundary Problem for Minimal Surfaces 227

Balas, A.: Compact Hermitian Manifolds of Constant Holomorphic Sectional Curvature 193

Bantle, G.: Obere Abschätzung für die Anzahl der B-Zwillinge auf kurzen Intervallen 561

Blackadar, B., Kumjian, A.: Skew Products of Relations and the Structure of Simple C^*-Algebras 55

Bleiler, S.A.: Strongly Invertible Knots Have Property R 365

Böcherer, S.: Über die Fourier-Jacobi-Entwicklung Siegelscher Eisensteinreihen II 81

Brown, KA., Levasseur, T.: Cohomology of Bimodules Over Enveloping Algebras 393

Bruna, J., Cufí, J., Verdera, J.: Cauchy Kernels in Strictly Pseudoconvex Domains and an Application to a Mergelyan Type Approximation Problem 41

Calvert, B., s. Fitzpatrick, S. 555

Carlisle, D., Eccles, P., Hilditch, S., Ray, N., Schwartz, L., Walker, G., Wood, R.: Modular Representations of $GL(n, p)$, Splitting $\Sigma(\mathbb{C}P\infty \times \ldots \times \mathbb{C}P\infty)$, and the β-family as Framed Hypersurfaces 239

Collingwood, D.H.: A Note on Continuous Cohomology for Semisimple Lie Groups 65

Cufí, J. s. Bruna, J. et al. 41

Dade, E.C.: Generalized Clifford Correspondences for Group Characters 19

Dye, R.H.: Maximal Subgroups of the Finite Orthogonal and Unitary Groups Stabilizing Anisotropic Subspaces 111

Dziuk, G.: C^2-Regularity for Partially Free Minimal Surfaces 71

Eccles, P., s. Carlisle, D., et al. 239

Emilion, R., Hachem, B.: A Multiparameter Strongly Superadditive Ergodic Theorem 11

Fitzpatrick, S., Calvert, B.: In a Nonreflexive Space the Subdifferential is Not Onto 555

Gay, R., Sebbar, A.: Division et extension dans l'algèbre $A^{\infty}(\Omega)$ d'un ouvert pseudoconvexe à bord lisse de $\mathbb{C}^n$ 421

Ginibre, J., Velo, G.: The Global Cauchy Problem for the Non Linear Klein-Gordon Equation 487

Graham, I., Wu, H.: Characterizations of the Unit Ball B^n in Complex Euclidean Space 449

Hachem, B., s. Emilion, R. 11

Hansell, R.W., Jayne, J.E., Labuda, I., Rogers, C.A.: Boundaries of and Selectors for Upper Semi-Continuous Multi-Valued Maps 297

Hauschild, V.: Actions of Compact Lie Groups on Homogeneous Spaces 475

Haußmann, W., Jetter, K., Steinhaus, B.: Degree of Best Approximation by Triginometric Blending Functions 143

Hilditch, S., s. Carlisle, D., et al. 239

Hill, T.P.: Equipartitioning Common Domains of Non-Atomic Measures 415

Jayne, J.E., s. Hansell, R.W., et al. 297

Jetter, K., s. Haußmann, W., et al. 143

Jia-chen, Y.: Filtrations of Principal Indecomposable Modules of Frobenius Kernels of Reductive Groups 515

Kneppers, H.A.W.M.: The Hasse-Witt Matrix of a Formal Group . . . 151

Kumjian, A., s. Blackadar, B. 55

Labuda, I., s. Hansell, R.W., et al. 297

Lai, K.F.: Algebraic Cycles on Compact Shimura Surface 593

Levasseur, T., s. Brown, K.A. 393

Loos, O.: Charakterisierung symmetrischer R-Räume durch ihre Einheitsgitter 211

Makino, R.: QF-1 Algebras of Local-Colocal Type 571

Mitchell, S.A.: Splitting $B(\mathbb{Z}/p)^n$ and BT^n Via Modular Representation Theory 1

Myerson, G.: On The Values of the Dedekind Sum 337

Parrini, C., Selvaggi Primicerio, A.: Uniform Estimate for the $\bar{\partial}$-Problem in a Class of Branched Covering of Strictly Pseudoconvex Domains 465

Patrizio, G.: A Characterization of Complex Manifolds Biholomorphic to a Circular Domain 343

Petersson, H.: Über gewisse Dirichlet-Reihen mit Eulerscher Produktzerlegung 273

Ray, N., s. Carlisle, D., et al. 239

Rees, S.: Finite C_3 Geometries in Which All Lines Are Thin 263

Rogers, C.A., s. Hansell, R.W., et al. 297

Ruh, B.: Krümmungstreue Diffeomorphismen Riemannscher und pseudo-Riemannscher Mannigfaltigkeiten 371
Sauvigny, F.: Die zweite Variation von Minimalflächen im $\mathbb{R}^p$ mit polygonalem Rand 167
Schwartz, L., s. Carlisle, D., et al. 239
Sebbar, A., s. Gay, R. 421
Selvaggi Primicerio, A., s. Parrini, C. 465
Steinhaus, B., s. Haußmann, W., et al. 143
Sterk, H.: Finiteness Results for Algebraic K3 Surfaces 507
Straube, E.J.: CR-Distributions and Analytic Continuation at Generating Edges 131
Terasoma, T.: Complete Intersections with Middle Picard Number 1 Defined over Q 289
Tomi, F., s. Alt, H.W. 227
Velo, G., s. Ginibre, J. 487
Verdera, J. s. Bruna, J., et al. 41
Walker, G., s. Carlisle, D., et al. 239
Webb, G.F.: Dynamics of Populations Structured by Internal Variables 319
Wood, R., s. Carlisle, D., et al. 239
Wu, H, s. Graham, I. 449
Yamaguchi, T.: The Isometry Groups of Manifolds of Nonpositive Curvature with Finite Volume 185
Zeuner, H.: Die Existenz einer Lévy-Abbildung auf einem homogenen Raum 529

Covered by Zentralblatt für Mathematik and
Current Mathematical Publications